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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,135	06/05/2001	David Seneor	3848-010270	3534

7590

04/02/2004

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Pittsburgh, PA 15219-1818

EXAMINER
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BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/763,135

**Applicant(s)**

SENEOR, DAVID

**Examiner**

Christopher P Bruenjes

**Art Unit**

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 24, 2003 has been entered.

***Response to Amendment***

2. The Declaration under 37 CFR 1.132 filed November 24, 2003 is sufficient to overcome the rejection of claims 1, 3-4, and 7-10 based upon 35 U.S.C. 102 as anticipated by Sharp or a potential 35 U.S.C. 103 rejection over Sharp.

***WITHDRAWN REJECTIONS***

3. The 35 U.S.C. 102 rejections of claims 1, 3-4, and 7-10 as anticipated by Sharp of record in Paper #10, Page 3 Paragraph 4, have been withdrawn due to Applicant's amendments in the Paper filed November 24, 2003.

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4. The 35 U.S.C. 103 rejections of claims 2 and 6 over Sharp in view of Bartelloni of record in Paper #10, Pages 4-5 Paragraph 5, have been withdrawn due to Applicant's amendments in the Paper filed November 24, 2003.

5. The 35 U.S.C. 103 rejection of claim 5 over Sharp in view of Mitchell of record in Paper #10, Pages 5-6 Paragraph 6, have been withdrawn due to Applicant's amendments in the Paper filed November 24, 2003.

**NEW REJECTIONS**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-4, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Robbins (USPN 5,167,352).

Robbins anticipates an underground reservoir for storing liquid products (col.1, 1.13-15). The reservoir consisting of

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an inner, main reservoir made from carbon steel, and an outer secondary reservoir (col.1, 1.15-18). The secondary reservoir consists of one-sided corrugated cardboard, which is a paper material, (col.16, 1.44-47) and an outer layer of resin (col.16, 1.60-64). The outer layer of resin is formed with or without fiber-reinforcement from polyurethane (col.12, 1.34-39).

Because the outer layer of resin is formed completely from polyurethane and no other additives are mentioned, the polyurethane is inherently made without the addition of any solvents. The thickness of the outer layer is approximately 0.1 inch or 2.54mm (col.12, 1.49-55). Robbins also anticipates a method of making the reservoir comprising the steps of providing an inner, main reservoir and covering an outer surface of said main reservoir with a first coating layer consisting of a paper material, and applying a second coating layer consisting of polyurethane over said first coating layer (col.1, 1.13-25).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (USPN 5,167,352) in view of Bartelloni (USPN 4,510,019).

Robbins teaches an underground reservoir for storing liquid products and process of manufacturing said reservoir, consisting of an inner, main reservoir and an outer, secondary reservoir (see abstract). The inner, main reservoir comprises a layer of carbon steel and a layer of interstitial space (col.1, 1.13-25). The interstitial space layer is a open-cell foam material and the secondary, main reservoir consists of an inner layer or vapor barrier sheet made from a paper material, such as waxed paper and an outer layer of resin (col.14, 1.30-41). The outer layer consists of polyurethane made without the addition of any

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solvents and is formed with or without fiber-reinforcement (col.12, 1.34-39). The outer layer is has a thickness of approximately 0.1 inches or 2.54mm (col.12, 1.49-55).

Robbins fails to explicitly teach the vapor barrier sheet of paper material is formed from latex-based paper. However, Bartelloni teach that latex-based paper is used in construction as a paper that possesses impermeability, flexibility, and resistance (col.1, 1.19-30). Robbins teaches that the vapor barrier sheet must be resistant and impermeable (col.14, 1.30-41) and teaches two examples, waxed paper and Saran Wrap, which are both impermeable, flexible, resistant materials, for the vapor barrier sheet. One of ordinary skill in the art would have recognized that latex-based paper, which possesses the properties to perform the requirements of the vapor barrier sheet, would be used in forming a barrier between open-cell foam material and an outer resin layer of an underground storage reservoir, because latex-based paper is impermeable, flexible and resistant, as taught by Bartelloni.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to use the latex-based paper of Bartelloni as the vapor barrier sheet of Robbins in order to provide a material that is impermeable, flexible and resistant, as taught by Bartelloni.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (USPN 5,167,352) in view of Mitchell (USPN 5,090,586).

Robbins teach all that is claimed in claim 4 as shown above, but fail to explicitly teach jet-blasting portions of the outer surface of said main reservoir to enhance the adhesion of said first coating layer. However, Mitchell teaches that it is a common technique to abrasive or "jet" blast steel for the purpose of enhancing bonding in the dual wall tank art (col. 4 lines 14-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a step in making Robbins to abrasive or "jet" blast the steel main reservoir before applying the tack for bonding the corrugated cardboard to the steel reservoir in order to enhance bonding, as taught by Mitchell.

***ANSWERS TO APPLICANT'S ARGUMENTS***

9. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 1, 3-4, and 7-10 as anticipated by Sharp have been considered but are moot since the rejections have been withdrawn.



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10. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 2 and 6 over Sharp in view of Bartelloni have been considered but are moot since the rejections have been withdrawn.

11. Applicant's arguments regarding the 35 U.S.C. 103 rejection of claim 5 over Sharp in view of Mitchell have been considered but are moot since the rejections have been withdrawn.

#### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pietrantoni (US 2001/0040166 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB

March 12, 2004

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772 3/29/04